

Notice of Allowability

Application No.

09/910,904

Examiner

Lynette T. Umez-Eronini

Applicant(s)

YASUI ET AL.

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/20/04.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ The drawings filed on 7/24/01 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 2/3/04 & 4/30/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

NADINE G. NORTON
SUPERVISORY PATENT EXAMINER



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Juan A. Carlos Marquez on 4/30/2004.

The application has been amended as follows:

In claim 1 line, 7, after "wafer", insert --by polishing with said grindstone and said dispersant-containing process liquid,--;

In claim 7, line 1, delete "1" and insert --6-- in its place.

In claim 10, line 1, delete [including,] and insert --comprises--;

In claim 11, line 8, after "another," insert --by polishing with said grindstone and said dispersant-containing process liquid,--;

In claim 14, line 8, after "another," insert --by polishing with said grindstone and said dispersant-containing process liquid,--;

In claim 15, line 2, after "1%", insert --wt--;

In claim 15, line 2, after "1.5%", insert --wt--;

In claim 16, line 3, delete [gains], then insert --grains--.

In claim 16, line 8, after "another," insert --by polishing with said grindstone and said dispersant-containing process liquid,--;

In claim 19, line 8, after "abrasive grains", insert "--,--";

In claim 19, line 9, after "substrate", insert "--with said grindstone and said dispersant-containing process liquid--";

In claim 19, line 13, delete "--averse gain--", then insert "average grain".

2. The following is an examiner's statement of reasons for allowance: Applicants' presented persuasive arguments (on pages 8-10 of REMARKS of Amendment, filed 1/23/2004), which show:

As to claims, 1-10, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a process for producing a semiconductor device comprising the step of: polishing and planarizing the surface of a semiconductor wafer by polishing with a grindstone and an abrasive-free processing liquid that is fed to a surface of the grindstone, in combination with the rest of the limitations of the above claims;

As to claims 11-13, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a process for producing a semiconductor device comprising the step of: polishing and planarizing the surface of a semiconductor wafer over which a silicon nitride film and a silicon oxide film have been stacked one after another, by polishing with a grindstone and an abrasive-free processing liquid that is fed to a surface of the grindstone, in combination with the rest of the limitations of the above claims;

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As to claims 14-15, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a process for fabricating a semiconductor device comprising the step of: polishing and planarizing the surface of a semiconductor wafer over which a silicon nitride film and a silicon oxide film have been stacked one after another, by polishing with a grindstone and an abrasive-free processing liquid that fed is to a surface of the grindstone, in combination with the rest of the limitations of the above claims;

As to claims 16-18, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a process for fabricating a semiconductor device comprising the step of: polishing and planarizing the surface of a semiconductor wafer over which a silicon nitride film and a silicon oxide film have been stacked one after another, by polishing with a grindstone and an abrasive-free processing liquid that is fed to a surface of the grindstone, in combination with the rest of the limitations of the above claims; and

As to claims 19-22, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a production process of a semiconductor device comprising the step of: polishing the surface of a semiconductor substrate with a grindstone and an abrasive-free processing liquid that is fed to a surface of the grindstone, in combination with the rest of the limitations of the above claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynette T. Umez-Eronini whose telephone number is 571-272-1470. The examiner is normally unavailable on the First Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 30, 2004

NADINE G. NORTON
SUPERVISORY PATENT EXAMINER

